



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,730	12/30/2003	Alexander M. Franz	GOOGP016	9049
23689	7590	02/11/2008	EXAMINER	
Jung-hua Kuo			HO, BINH VAN	
Attorney At Law				
PO Box 3275			ART UNIT	
Los Altos, CA 94024			2163	
			MAIL DATE	
			02/11/2008	
			DELIVERY MODE	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/749,730	FRANZ ET AL.	
	Examiner	Art Unit	
	Binh V. Ho	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 19-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/30/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a response to amendment filed 10/18/2007.
- 2.

Information Disclosure Statement

3. The information disclosure statement document number US 2003/217052 filed on 08/31/2005, the information referred to therein has not been considered because this document number could not be retrieved in USPTO database.
- 4.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schabes (U.S. 2004/0093567) in view of Zelinski (U.S. 6,501,855).

(Claims 1-8, 10, 19-22, and 24-29)

Schabes discloses in figures 3-5, 11, 14-15, substantially all of the elements, a method comprising receiving a query containing at least one query term; performing at least one Of (A) determining whether the query includes one or more compound query terms, and if so, automatically expanding the query to include one or more alternative representations of said one or more compound query terms, each compound query

term being a word pair that can be written separately, as a single compounded word, or as a hyphenated term ("compound word which is comprised of two or more separate words", paragraph [0026], [0107], [0118]); (B) determining whether one or more query terms are included in a set of inflectional forms, and if so, automatically expanding the query to include one or more corresponding inflectional forms from the set of inflectional forms, each inflectional term being a word having a plurality of inflectional forms for expressing grammatical relationships ("Thus, FST 114 shown in FIG. 15 indicates that left can be an adjective ("ADJ") having a base form of left and a weight of 5, a noun ("N") having a base form of left and a weight of 1, a verb in past participle form ("Vpp") having a base form of leave and a weight of 4, or a verb in past tense form having a base form of leave and a weight of 3", paragraph [0121]); and searching a database using the expanded query; and returning results to a user, except (C) determining whether one or more query terms are included in a set of alternative spellings, and if so, automatically expanding the query to include one or more corresponding alternative spellings from the set of alternative spellings, each set of alternative spellings being a word that can be spelled in a plurality of different ways. Zelinski teaches in figure 9, there will be a plurality of metastroke sequences for each query. These sequence variations will reflect alternative common metastrokes for the characters in the query and also will reflect alternative phonetic spellings for the query (col. 9, lines 3-28). It would have been obvious at the time of the invention was made for one person of the ordinary skill in the art to modify the disclosure of Zelinski to provide alternative phonetic spellings for user to select the right word.

(Claim 2)

Schabes discloses in which the method includes determining whether the query includes one or more compound query terms, and if so, automatically expanding the query to include one or more alternative representations of said one or more compound query terms ("compound word which is comprised of two or more separate words", paragraph [0026], [0107], [0118]).

(Claims 3, 5, and 29)

Schabes discloses in which the method includes determining whether one or more query terms are included in a set of inflectional forms, and if so, automatically expanding the query to include one or more corresponding inflectional forms from the set of inflectional forms ("Thus, FST 114 shown in FIG. 15 indicates that left can be an adjective ("ADJ") having a base form of left and a weight of 5, a noun ("N") having a base form of left and a weight of 1, a verb in past participle form ("Vpp") having a base form of leave and a weight of 4, or a verb in past tense form having a base form of leave and a weight of 3", paragraph [0121]).

(Claim 4)

Zelinski discloses in which the method includes determining whether one or more query terms are included in a set of alternative spellings, and if so, automatically expanding the query to include one or more corresponding alternative spellings from the set of alternative spellings (These sequence variations will reflect alternative common metastrokes for the characters in the query and also will reflect alternative phonetic spellings for the query, col. 9, lines 3-28).

(Claims 7-8, 25-26)

Schabes discloses in which determining whether the query includes one or more compound query terms includes comparing a query term to a list of compound terms ("compound word which is comprised of two or more separate words", paragraph [0026], [0107], and [0118]).

(Claims 20 and 21)

Schabes discloses in figures 20-23, further including instructions that, when executed by a processor, cause the processor to perform actions comprising searching a database of documents using the expanded query; identifying one or more documents responsive to the expanded query; and preparing a list of said one or more documents for transmission to the user (paragraph [0149], [0152], [0155]).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schabes (U.S. 2004/0093567) in view of Taboada (U.S. 2007/0136261).

(Claim 9)

Schabes discloses substantially all of the elements, except which the query is written in German. Taboada teaches query strings in English, Spanish, German, Swedish, Polish, Japanese, Korean, Chinese, and Thai may be split into respective query terms by the word breaker module (paragraph [0057]). It would have been obvious at the time of the invention was made for one person of the ordinary skill in the art to modify the disclosure of Taboada to support multiple languages.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schabes (U.S. 2004/0093567) in view of Hobson (U.S. 2007/0136261).

(Claim 23)

Schabes discloses substantially all of the elements, except which the one or more linguistic techniques comprise one or more of compound term expansion, inflection set expansion, or orthographic expansion. Hobson teaches in French there are clitics, such as "L'enfant," that use a combination of both an article and a noun and, in German, there are compound words such as "koptzeilenabsatz" which require special processing (col. 19, lines 50-63). It would have been obvious at the time of the invention was made for one person of the ordinary skill in the art to modify the disclosure of Hobson to support multiple languages.

Conclusion

9. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Inquiry

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh V Ho
Examiner
Art Unit 2163


DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100